REMARKS

Claims 1, 2 and 4-18 are pending in this application. Claim 3 has been cancelled, claim 1 has been revised to include the subject matter of claim 3, and claims 12-18 have been added. Claim 1 is independent.

Support for the claim changes and new claims can be found throughout the application as filed, for example, in Figs. 4, 7 and 8, and at page 18, line 6, through page 19, lines 7 and page 22, line 7, through page 23, line 9.

Various claim changes have been made to provide Applicants with a scope of protection commensurate with their invention and to distinguish further over the art of record, as will now be discussed in greater detail.

For example, claim 12 provides a more sure way to prevent leakage of ink.

Claim 13 provides that the insertion of the ink supply needle into the ink cartridge and the action of air-releasing are completed in one action by the user. It also should be understood that this would cover cartridges designed such that the insertion of the ink supply needle and the releasing of air are part of a single operation, even though they do not necessarily occur at the exact same time due to some lag resulting from the structure of the ink cartridge. That is, the ink supply needle might start to enter the ink cartridge but air is not released until the needle entering the ink cartridge has passed some point.

Claim 14 is directed to a feature which can prevent or reduce corrosion of the pressing member by the ink.

Claims 16 and 17 serve to clarify the arrangement of the pressing member and the air-releasing valve member.

Claim 18 provides that the area of the pressed portion of the air-releasing valve member is larger than the area of the contact portion. This way, if the pressure on the atmosphere side of the valve member is lower than the pressure on the ink-accommodation portion side, say, when the ink cartridge is packaged in a vacuum, the air-releasing valve member automatically can seal the communication hole even if the pressing member is fatigued.

Also, should the atmosphere-side pressure suddenly exceed the pressure on the ink-accommodating portion side, say, when the vacuum packaging is opened, the sudden pressure change will have substantially no effect, since the area of the contact portion is smaller than the area of the pressed portion.

Thus, these additional claims further distinguish over the art of record.

Regarding the cited art, Applicants wish to point out that during study of European Patent Appln. No. 1 199 178 to Miyazawa et al., it felt that distinguishing the present invention from the structure taught in Fig. 8 of Miyazawa could be of help to the Examiner. In particular, to avoid any question as to whether Applicants' earlier patentability arguments distinguishing Miyazawa from the claimed invention[1] are consistent with Fig. 8 of Miyazawa, Applicants offer the following clarification as to why this invention is not anticipated or suggested by Miyazawa.

Arguably, in Fig. 8 of Miyazawa, the sealing direction of valve member 27 is directed from the first ink chamber 3 toward the air chamber 21 (that is, from the ink accommodating portion side toward the atmosphere side).

Thus, claim 1 has been revised to refer to a sealing direction being from the ink accommodating portion side toward the atmosphere side, and to delete the feature providing that the valve mechanism extends in a direction from the ink accommodating portion side toward the

[1] Applicants had previously contended that the sealing direction of the present invention is different from that of Miyazawa.

atmosphere side. This newly-presented feature, it is respectfully submitted, can provide benefits in preventing ink leakage, especially when the ink cartridge is packaged in outer packing member 160 (discussed at page 30, lines 4-12, of the specification).

Claim 1 also now includes a pressing member that presses the air-releasing valve member toward the atmosphere side. This way, when the ink cartridge is not mounted on the ink-jet printing apparatus, the communication hole is sealed by air-releasing valve, as can be seen in application Fig. 7. On the other hand, when the ink cartridge is mounted on the ink-jet printing apparatus, the communication hole must be related (opened) smoothly. In other words, it is necessary to control or adjust the pressing force that is applied to the air-releasing valve member.

With this and Miyazawa's Fig. 8 in mind, it will be appreciated that the sealing by the valve member 27 is not so stable when compared to the structure of the present invention, since the front part of the long rod-shaped valve member 27 is pulled by spring plate 26 (while the spring plate 26 arguably presses against the tip of the valve member 27, the force exerted is transmitted along the length of the valve member so as to pull forward the seat portion of the valve member, and not press that seat portion. Consequently, the controlling or adjustment of the pressing force in Miyazawa differs from and is not suggestive of the invention as claimed, where the air-releasing valve member is pressed in the forward direction by elastic member to make it easier to control the pressing force.

This way, the present invention can make it easier to control the pressing force when the air-releasing valve member is pressed directly by the elastic member.

CONCLUSION

It is respectfully submitted that this application patentably distinguishes over the art of record. Favorable consideration and prompt allowance of this application are requested.

Other than the Request for Continued Examination Fee authorized by the accompanying Request for Continued Examination Fee Transmittal (PTO/SB/30), no fees are believed due in connection with the filing of this paper. Nevertheless, should the Commissioner deem any fees to be now or hereafter due, the Commissioner is authorized to charge such fees to deposit account no. 19-4709.

In the event that there are any questions, or should additional information be required, please contact Applicants' attorney at the number listed below.

Respectfully submitted,

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